

Greenway Engineering provides a “One Stop” solution for Onsite Wastewater Disposal Evaluation, Survey, Design, and Inspection.

### **Professional Soils Scientist Staff**

- Four member Soil Scientist staff with almost a century of combined experience
- Credentials include Certified Professional Soils Scientist (CPSS) and Authorized Onsite Soil Evaluator (AOSE)
- Complete soil evaluation for single or multiple lot subdivisions
- Complete evaluations for all types of alternative sewage disposal systems
- Complete existing system evaluations

### **Professional Land Survey Staff**

- Drainfield Location and Easement Plats
- Subdivision Plats
- Complete System Stakeout

### **Professional Engineering Staff**

- Authorized Advantex Treatment System soil evaluators and engineering design firm
- Puraflo certified for Engineering designs and plans
- Design of all types of sewage disposal systems
- Staff of professional Engineers (P.E.) to design and prepare plans and specifications for alternative sewage disposal systems

### **About Greenway Engineering**

Greenway Engineering has provided Civil Engineering and Land Surveying services to the Valley’s counties, cities, and towns since the firm’s founding in 1971. A complete range of services – from feasibility studies through construction stake-out – enables Greenway Engineering to assist in the development of a project from the first step through the last.

At Greenway, client communication is a priority. We will listen to your needs and provide you with the highest quality of service, keeping you informed of the progress of your project every step of the way.

### **Contact Greenway Engineering**

151 Windy Hill Lane  
Winchester, VA 22602

T: 540.662.4185  
F: 540.722.4185



Call 540.662.4185 for more information regarding county specific pricing and ask about our package savings.

[www.GreenwayEng.com](http://www.GreenwayEng.com)

Steps to a Conventional or Alternative Wastewater Disposal System

# Certification/Permit Package

## Requirements for Onsite Wastewater Disposal

The Virginia Department of Health, (VDH), establishes minimum standards for onsite wastewater disposal, methods of practice, and quantitative and qualitative standards. Local counties can individually amend more stringent local regulations and blend county subdivision ordinance with the onsite wastewater disposal regulations.

A number of parameters involving soil type, depth, structure, color, consistence, and texture determine a property's ability to absorb, treat, and dispose of wastewater. Other property characteristics including topography, landscape, proximity to other onsite wastewater disposal systems and potable water wells, determine the location, size, and type of drainfield that may be approved for the particular property.

## Conventional or Alternative Systems

Conventional onsite wastewater disposal is defined as a system that consists of a septic tank, distribution box, and buried wastewater percolation lines. More stringent regulations designed to insure that wastewater contaminants do not re-interface with surface and ground water have resulted in some properties being unable to satisfy the requirements for a conventional system.

The recent advent of alternative wastewater onsite treatment technology has created a range of options for sites that do not have the soils characteristics desirable for conventional wastewater disposal. For more information regarding Virginia regulations:

[www.vdh.state.va.us/onsite/index.asp](http://www.vdh.state.va.us/onsite/index.asp)

## Do I Need a Certification Letter or Permit?

A certification letter provides recorded documentation that an approved onsite wastewater disposal site exists for the property. A certification letter is transferable to a prospective buyer and is desirable if you are not planning to build within the next 18 months. A certification letter is good indefinitely as long as the property is not altered or disturbed.

## Steps to a Certification Letter:

- **Onsite Soil Evaluation:** An Approved Onsite Soils Evaluator (AOSE) or Certified Professional Soil Scientist (CPSS) will evaluate the properties of the soil, the topography and landscape characteristics, proximity to adjacent properties' water and wastewater disposal systems, then layout the geometric shape of either a conventional or alternative drainfield onsite if all conditions are met.
- **Drainfield Location Plat:** After the AOSE or CPSS stakes the location of the drainfield site, a Certified Land Surveyor provides field work and drafting services to determine precise confirmation of the drainfield's location as it relates to the property's boundary lines. Deed Research is performed to confirm that the completed plat is congruent with the field survey.

With the completed soils evaluation and drainfield location plat, the soils scientist completes the soil profile forms, soil summary report, and abbreviated design form. The application packet is ready for submission to the county Health Department Office for approval.

## I'm Going to Build, What's Next?

*If the soil scientist was only able to locate a wastewater disposal site that requires pretreatment or a pumped drainfield, an Alternative Wastewater Disposal system must be designed by a professional engineer.*

- **Alternative Design Plans:** A number of alternative systems are currently approved for use in Virginia, however; each county had the jurisdiction to deny the use of all or particular systems. A professional Engineer licensed in the state of Virginia must prepare a detailed set of design plans tailored to your property's topography, proposed house location, and the detailed specifications for the type of alternative system. Greenway's staff of professional engineers and alternative design specialists can design a custom solution for your property.

## Permit to Construct/Inspection

*If the soil scientist was only able to locate a wastewater disposal site that requires*

- **Permit:** If you are planning to build within the next 18 months, the certification statement can be submitted with a permit application that has been completed by the soil scientist.
- **Final Inspection:** After the conventional or alternative system has been installed, the AOSE and/or the design engineer will inspect the installation to insure compliance with VDH regulations.